

"ORIGINAL VERSION"

## Roadway Cost for a Sub-Urban Section

Improvement Description	Units	Cost per Unit	3-LANE SUB URBAN	5-LANE SUB URBAN
			SECTION Per Mile Cost	SECTION Per Mile Cost
Concrete Pavement (12 ft. lanes) + LEFT TURN LANES	Sq. Ft.	\$5.00	\$1,214,400.00	\$2,006,400.00
Sidewalk on one side ( 4" thick by 4'-0")	Sq. Ft.	\$4.00	\$84,480.00	\$84,480.00
Bike Trail one side	Sq. Ft.	\$5.25	\$277,200.00	\$277,200.00
Landscaping	per mile	\$50,000.00	\$50,000.00	\$50,000.00
Trail Ped/Bike Signal	each	\$50,000.00	\$50,000.00	\$50,000.00
Traffic Signal (1/4 +1 +1 +1 + 1/4)	each	\$125,000.00	\$437,500.00	\$437,500.00
Street Lighting	each	\$3,000.00	\$84,000.00	\$84,000.00
Storm Sewer	Lump sum	\$250,000.00	\$250,000.00	\$250,000.00
Water - Line Adjustments (\$3,000 per mile)	Lump sum	\$3,000.00	\$3,000.00	\$3,000.00
Water - Hydrants	Lump sum	\$55,620.00	\$55,620.00	\$55,620.00
Waste Water ( resetting of man holes & Service)	Lump sum	\$2,500.00	\$2,500.00	\$2,500.00
Box Culvert	each	\$75,000.00	\$75,000.00	\$75,000.00
Retaining Wall	Sq. Ft.	\$17.65	\$176,500.00	\$176,500.00
			<u>\$2,760,200.00</u>	<u>\$3,552,200.00</u>

## Potential Additional costs assoc. to Project

Trail Grade Separation	each	\$375,000.00	\$375,000.00
Bridge ( 300', 4-lanes)	each	\$1,500,000.00	\$1,500,000.00
L.E.S.	Lin. ft.	\$75.00	\$396,000.00
Right - of - Way Acquisition ( 10' width acquisition increments)	per mile	\$26,400.00	\$26,400.00
Wetlands-Flood plain-Native Praire-Endangered species-Cul. Res.	per mi. var.	\$153,122.00	\$153,122.00
			<u>\$2,450,522.00</u>

## 'Revised Roadway Cost'

Improvement Description	Units	3-LANE SECTION Cost per Unit	5-LANE SECTION Cost per Unit	3-LANE SUB URBAN SECTION Per Mile Cost	5-LANE URBAN SECTION Per Mile Cost	CONVERT FROM 3 TO 5 LANE Per Mile Cost
Concrete Pavement (12 ft. lanes) + Turn Lanes	Sq. Ft.	\$5.00	\$5.00	\$1,214,400.00	\$1,969,320.00	\$950,400.00
Sidewalk on both sides ( 5" thick by 5'-0")	Sq. Ft.	\$5.25	\$5.25	\$277,200.00	\$277,200.00	---
Landscaping (\$50,000 per mile)	per mile	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	---
Traffic Signal (1/4 + 1 + 0 + 1 + 1/4) (2.5 per mile)	each	\$125,000.00	\$125,000.00	\$312,500.00	\$312,500.00	---
Storm Sewer (3 & 5 Lane at \$250,000 avg.)	Lump sum	\$250,000.00	\$250,000.00	\$250,000.00	\$250,000.00	---
Box Culvert (avg. 1 per mile at \$75,000)	each	\$75,000.00	\$75,000.00	\$75,000.00	\$75,000.00	---
Retaining Wall (2,500 Sq. Ft.)	Sq. Ft.	\$17.65	\$17.65	\$44,125.00	\$44,125.00	---
				<b>\$2,223,225.00</b>	<b>\$2,978,145.00</b>	<b>\$950,400.00</b>

## Potential Additional costs assoc. to Project

Trail Grade Separation	each	\$375,000.00	\$375,000.00	\$375,000.00	
Bridge ( 300', 4-lanes)	each	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00	
L.E.S.	Lin. ft.	\$75.00	\$75.00	\$396,000.00	
Right - of - Way Acquisition ( 10' width acquisition increments)	per mile	\$26,400.00	\$26,400.00	\$26,400.00	
Wetlands-Flood plain-Native Praire-Endangered species-Cul. Res.	per mi. var.	\$153,122.00	\$153,122.00	\$153,122.00	
				<b>\$2,450,522.00</b>	
Bike Trail (add 5'w x 5")		\$138,600.00	\$138,600.00	\$138,600.00	
			<b>Total =</b>	<b>\$2,589,122.00</b>	

## Roadway Cost Adjustments for the above Suburban Section

	3-LANE SECTION	5-LANE SECTION
Concrete Pavement costs for 5-lane Urban - Removed cost for two left turn lanes at the half mile point.		(\$37,080.00)
Sidewalks - Increase from one side to both sides	\$192,720.00	\$192,720.00
(changed unit cost from \$4.00 Sq. Ft. to \$5.25 Sq. Ft.)		
(Changed thickness from 4" TO 5")		
(changed width from 4'-0" to 5'-0")		
Bike Trail - removed cost.	(\$277,200.00)	(\$277,200.00)
Trail/Ped Bike Signal - removed cost.	(\$50,000.00)	(\$50,000.00)
Traffic Signals - removed cost for a traffic signal at the half mile point.	(\$125,000.00)	(\$125,000.00)
Street Lighting - removed cost for street lighting.	(\$84,000.00)	(\$84,000.00)
Water - Line Adjustments - removed cost.	(\$3,000.00)	(\$3,000.00)
Water - Hydrants - removed cost.	(\$55,620.00)	(\$55,620.00)
Waste Water (resetting of manholes & Service) removed cost.	(\$2,500.00)	(\$2,500.00)
Retaining Wall - reduced cost by 75%.	(\$132,375.00)	(\$132,375.00)
	<b>(\$536,975.00)</b>	<b>(\$574,055.00)</b>

Note: Right-of-Way acquisition assumption for developed area 100%  
and outlying areas 25%

		From Original	To Revised	Difference
3-lane section cost adjustment	=	\$2,760,200.00	\$2,223,225.00	(\$536,975.00)
5-lane section cost adjustment	=	\$3,552,200.00	\$2,978,145.00	(\$574,055.00)

# ORIGINAL CATEGORY 5

## CITY'S TOTAL ROADWAY NETWORK USES AND SOURCES

02/11/2003

### 1ST & 2ND 6 YEAR PERIOD and 12 Year Total

(NO INFLATION)

USES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Project Costs			
Antelope Valley Projects	\$66,760,000	\$72,650,000	\$138,410,000
South Beltway Project	\$24,120,000	\$0	\$24,120,000
East Beltway Project	\$0	\$1,221,000	\$1,221,000
Street Operations and Maintenance	\$44,379,000	\$50,569,000	\$94,948,000
Arterial and Residential Rehabilitation	\$38,039,000	\$43,345,000	\$81,384,000
Committed Projects as of Sept 1, 2002	\$29,890,000	\$0	\$29,890,000
Remaining Baseline Projects	\$400,193,000	\$83,094,000	\$483,287,000
Total (rounded to nearest thousands)	\$602,381,000	\$250,879,000	\$853,260,000
		<b>TOTAL USE NEEDS =</b>	<b>\$853,260,000</b>

(NO INFLATION)

SOURCES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Funding Source			
CASH BALANCE as of Sept 1, 2002	\$24,000,000	\$0	\$24,000,000
(PB) Funds	\$3,000,000	\$3,000,000	\$6,000,000
(PC) Funds	\$24,000,000	\$24,000,000	\$48,000,000
(TMT) Funds	\$8,000,000	\$3,000,000	\$11,000,000
(RTSD) Funds	\$9,000,000	\$9,000,000	\$18,000,000
(SO) Funds	\$100,296,074	\$119,410,369	\$219,706,444
(WC) Funds	\$21,699,936	\$24,437,653	\$46,137,589
(WR) Funds	\$30,407,866	\$34,243,971	\$64,651,837
(IF) Funds	\$14,480,000	\$26,870,000	\$41,350,000
STATE 80% MATCH ( Sun Valley Proj.)	\$0	\$12,000,000	\$12,000,000
OTHER (CO, BR)	\$6,000,000	\$6,000,000	\$12,000,000
Total (rounded to nearest thousands)	\$240,884,000	\$281,762,000	\$502,646,000
		<b>TOTAL AVAILABLE SOURCE =</b>	<b>\$502,646,000</b>

Period 1, 2 & and 12 year Total GAP	(\$361,497,000)	\$10,883,000	(\$350,614,000)
		<b>TOTAL SOURCE GAP =</b>	<b>(\$350,614,000)</b>

# CATEGORY 5 ( Only Cost Modified)

## CITY'S TOTAL ROADWAY NETWORK USES AND SOURCES

02/11/2003

### 1ST & 2ND 6 YEAR PERIOD and 12 Year Total

(NO INFLATION)

USES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Project Costs			
Antelope Valley Projects	\$65,760,000	\$72,650,000	\$138,410,000
South Beltway Project	\$24,120,000	\$0	\$24,120,000
East Beltway Project	\$0	\$1,221,000	\$1,221,000
Street Operations and Maintenance	\$44,379,000	\$50,569,000	\$94,948,000
Arterial and Residential Rehabilitation	\$38,039,000	\$43,345,000	\$81,384,000
Committed Projects as of Sept 1, 2002	\$29,890,000	\$0	\$29,890,000
Remaining Baseline Projects	\$366,296,000	\$77,804,000	\$444,100,000
Total (rounded to nearest thousands)	\$568,484,000	\$245,589,000	\$814,073,000
		<b>TOTAL USE NEEDS =</b>	<b>\$814,073,000</b>

(NO INFLATION)

SOURCES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Funding Source			
CASH BALANCE as of Sept 1, 2002	\$24,000,000	\$0	\$24,000,000
(PB) Funds	\$3,000,000	\$3,000,000	\$6,000,000
(PC) Funds	\$24,000,000	\$24,000,000	\$48,000,000
(TMT) Funds	\$8,000,000	\$3,000,000	\$11,000,000
(RTSD) Funds	\$9,000,000	\$9,000,000	\$18,000,000
(SO) Funds	\$100,296,074	\$119,410,369	\$219,706,444
(WC) Funds	\$21,699,936	\$24,437,653	\$46,137,589
(WR) Funds	\$30,407,666	\$34,243,971	\$64,651,637
(IF) Funds	\$14,480,000	\$26,670,000	\$41,150,000
STATE 80% MATCH ( Sun Valley Proj.)	\$0	\$12,000,000	\$12,000,000
OTHER (CO, BR)	\$6,000,000	\$6,000,000	\$12,000,000
Total (rounded to nearest thousands)	\$240,884,000	\$261,762,000	\$502,646,000
		<b>TOTAL AVAILABLE SOURCE =</b>	<b>\$502,646,000</b>
Period 1, 2 & and 12 year Total GAP	(\$327,600,000)	\$16,173,000	(\$311,427,000)
		<b>TOTAL SOURCE GAP =</b>	<b>(\$311,427,000)</b>

# CATEGORY 5 (Cost & Geometry Mod)

## CITY'S TOTAL ROADWAY NETWORK USES AND SOURCES

02/11/2003

### 1ST & 2ND 6 YEAR PERIOD and 12 Year Total

(NO INFLATION)

USES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Project Costs			
Antelope Valley Projects	\$65,760,000	\$72,650,000	\$138,410,000
South Beltway Project	\$24,120,000	\$0	\$24,120,000
East Beltway Project	\$0	\$1,221,000	\$1,221,000
Street Operations and Maintenance	\$44,379,000	\$50,569,000	\$94,948,000
Arterial and Residential Rehabilitation	\$38,039,000	\$43,345,000	\$81,384,000
Committed Projects as of Sept 1, 2002	\$29,890,000	\$0	\$29,890,000
Remaining Baseline Projects	\$350,423,000	\$72,119,000	\$422,542,000
Total (rounded to nearest thousands)	\$552,611,000	\$239,904,000	\$792,515,000
		<b>TOTAL USE NEEDS =</b>	<b>\$792,515,000</b>

(NO INFLATION)

SOURCES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015
Activity Elements			
Funding Source			
CASH BALANCE as of Sept 1, 2002	\$24,000,000	\$0	\$24,000,000
(PB) Funds	\$3,000,000	\$3,000,000	\$6,000,000
(PC) Funds	\$24,000,000	\$24,000,000	\$48,000,000
(TMT) Funds	\$8,000,000	\$3,000,000	\$11,000,000
(RTSD) Funds	\$9,000,000	\$9,000,000	\$18,000,000
(SO) Funds	\$100,296,074	\$119,410,369	\$219,706,444
(WC) Funds	\$21,699,936	\$24,437,653	\$46,137,589
(WR) Funds	\$30,407,666	\$34,243,971	\$64,651,637
(IF) Funds	\$14,460,000	\$26,670,000	\$41,150,000
STATE 80% MATCH ( Sun Valley Proj )	\$0	\$12,000,000	\$12,000,000
OTHER (CO, BR)	\$6,000,000	\$6,000,000	\$12,000,000
Total (rounded to nearest thousands)	\$240,854,000	\$261,762,000	\$502,646,000
		<b>TOTAL AVAILABLE SOURCE =</b>	<b>\$502,646,000</b>
Period 1, 2 & and 12 year Total GAP	(\$311,727,000)	\$21,858,000	(\$289,869,000)
		<b>TOTAL SOURCE GAP =</b>	<b>(\$289,869,000)</b>

# CATEGORY 5, (Cost, Geometry Mods. and Deferred Projects)

## CITY'S TOTAL ROADWAY NETWORK USES AND SOURCES

02/11/2003

02/11/2003

### 1ST & 2ND 6 YEAR PERIOD and 12 Year Total

(NO INFLATION)

USES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015	Remaining 13 years of 25 years 2016-2028
Activity Elements				
Project Costs				
Antelope Valley Projects	\$65,760,000	\$72,650,000	\$138,410,000	\$41,670,000
South Beltway Project	\$24,120,000	\$0	\$24,120,000	\$0
East Beltway Project	\$0	\$1,221,000	\$1,221,000	\$25,240,000
Street Operations and Maintenance	\$44,379,000	\$50,569,000	\$94,948,000	\$135,082,000
Arterial and Residential Rehabilitation	\$38,039,000	\$43,345,000	\$81,384,000	\$115,784,000
Committed Projects as of Sept 1, 2002	\$29,890,000	\$0	\$29,890,000	\$0
Remaining Baseline Projects	\$261,947,000	\$72,119,000	\$334,066,000	\$363,623,000
Total (rounded to nearest thousands)	\$464,135,000	\$239,904,000	\$704,039,000	\$681,399,000
		<b>TOTAL USE NEEDS =</b>	<b>\$704,039,000</b>	<b>\$1,385,438,000</b>

(NO INFLATION)

SOURCES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015	Remaining 13 years of 25 years 2016-2028
Activity Elements				
Funding Source				
CASH BALANCE as of Sept 1, 2002	\$24,000,000	\$0	\$24,000,000	\$0
(PB) Funds	\$3,000,000	\$3,000,000	\$6,000,000	\$8,500,000
(PC) Funds	\$24,000,000	\$24,000,000	\$48,000,000	\$52,000,000
(TMT) Funds	\$8,000,000	\$3,000,000	\$11,000,000	\$6,500,000
(RTSD) Funds	\$9,000,000	\$9,000,000	\$18,000,000	\$19,500,000
(SO) Funds	\$100,296,074	\$119,410,369	\$219,706,444	\$342,622,462
(WC) Funds	\$21,699,936	\$24,437,653	\$46,137,589	\$64,046,642
(WR) Funds	\$30,407,666	\$34,243,971	\$64,651,637	\$89,747,219
(IF) Funds	\$14,480,000	\$26,670,000	\$41,150,000	\$66,950,000
STATE 80% MATCH ( Sun Valley Proj.)	\$0	\$12,000,000	\$12,000,000	\$0
OTHER (CO, BR)	\$6,000,000	\$8,000,000	\$12,000,000	\$13,000,000
Total (rounded to nearest thousands)	\$240,884,000	\$261,762,000	\$502,646,000	\$660,866,000
		<b>TOTAL AVAILABLE SOURCE =</b>	<b>\$502,646,000</b>	<b>\$1,163,512,000</b>
Period 1, 2 & and 12 year Total GAP	(\$223,251,000)	\$21,858,000	(\$201,393,000)	(\$20,533,000)
		<b>TOTAL SOURCE GAP =</b>	<b>(\$201,393,000)</b>	<b>(\$221,926,000)</b>

# CATEGORY 5, (Cost, Geometry Mods., Deferred Projects and Conversions)

## CITY'S TOTAL ROADWAY NETWORK USES AND SOURCES

02/12/2003

02/12/2003

### 1ST & 2ND 6 YEAR PERIOD and 12 Year Total

(NO INFLATION)

USES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015	Remaining 13 years of 25 years 2016-2028
Activity Elements				
Project Costs				
Antelope Valley Projects	\$65,760,000	\$72,650,000	\$138,410,000	\$41,670,000
South Beltway Project	\$24,120,000	\$0	\$24,120,000	\$0
East Beltway Project	\$0	\$1,221,000	\$1,221,000	\$25,240,000
Street Operations and Maintenance	\$44,379,000	\$50,569,000	\$94,948,000	\$135,082,000
Arterial and Residential Rehabilitation	\$38,039,000	\$43,345,000	\$81,384,000	\$115,784,000
Committed Projects as of Sept 1, 2002	\$29,890,000	\$0	\$29,890,000	\$0
Remaining Baseline Projects	\$261,947,000	\$72,119,000	\$334,066,000	\$403,421,000
Total (rounded to nearest thousands)	\$464,135,000	\$239,904,000	\$704,039,000	\$721,197,000
		TOTAL USE NEEDS =	\$704,039,000	\$1,425,236,000

(NO INFLATION)

SOURCES	1st 6 Years Period 1 2004-2009	2nd 6 Years Period 2 2010-2015	Total 12 Year 2004-2015	Remaining 13 years of 25 years 2016-2028
Activity Elements				
Funding Source				
CASH BALANCE as of Sept 1, 2002	\$24,000,000	\$0	\$24,000,000	\$0
(PB) Funds	\$3,000,000	\$3,000,000	\$6,000,000	\$6,500,000
(PC) Funds	\$24,000,000	\$24,000,000	\$48,000,000	\$52,000,000
(TMT) Funds	\$8,000,000	\$3,000,000	\$11,000,000	\$6,500,000
(RTSD) Funds	\$9,000,000	\$9,000,000	\$18,000,000	\$19,500,000
(SO) Funds	\$100,296,074	\$119,410,369	\$219,706,444	\$342,622,462
(WC) Funds	\$21,699,936	\$24,437,653	\$46,137,589	\$64,046,642
(WR) Funds	\$30,407,666	\$34,243,971	\$64,651,637	\$89,747,219
(IF) Funds	\$14,480,000	\$26,670,000	\$41,150,000	\$66,950,000
STATE 80% MATCH ( Sun Valley Proj.)	\$0	\$12,000,000	\$12,000,000	\$0
OTHER (CO, BR)	\$6,000,000	\$6,000,000	\$12,000,000	\$13,000,000
Total (rounded to nearest thousands)	\$240,884,000	\$261,762,000	\$502,646,000	\$660,866,000
		TOTAL AVAILABLE SOURCE =	\$502,646,000	\$1,163,512,000

Period 1, 2 & and 12 year Total GAP (\$223,251,000)

\$21,858,000

(\$201,393,000)

(\$60,331,000)

TOTAL SOURCE GAP =

(\$201,393,000)

(\$261,724,000)

## **Other adjustments to Category 5 Roadway Network**

### **Roadways deferred from 1<sup>st</sup> 6-year period to beyond 12 years (in millions)**

	Project	Total Cost
▶	84 <sup>th</sup> Street - Highway 6 to "O" Street	\$20
▶	"O" Street - 72 <sup>nd</sup> Street to 98 <sup>th</sup> Street	\$9
▶	Cornhusker Highway - I 180 to 14 <sup>th</sup> Street	\$3
▶	14 <sup>th</sup> & Cornhusker Interchange	\$15
▶	14 <sup>th</sup> Street - Cornhusker to Military	\$6
▶	Highway 2 - Van Dom Street to Old Cheney Rd.	\$18
▶	Sun Valley Blvd. - Cornhusker to "O" Street	\$13
▶	N. 1 <sup>st</sup> Street - Superior Street to Cornhusker Hwy.	\$6

**Total Project Cost (includes ROW) = \$90 million**

**Note: These are deferred costs, not *Saved costs*.**

\$90 million divided by 16 miles of roadway projects = \$6 million per mile.  
At 1.6 % inflation for year 2013, costs would be = \$9.6 million per mile.